Metal Halide

General Information

The availability of Metal Halide (MH) Lighting Systems with improved performance and enhanced features has steadily grown over recent years and end users should consider the cost/benefits when replacing lamps and retrofitting systems.

SELECTING A METAL HALIDE LAMP

1. Determine the lumen and wattage package for the application.
2. Determine the desired correlated color temperature (CCT) in degrees Kelvin and whether to use a clear or coated lamp. CCT range from 2800K to 5000K with the standard MH being 4000K
3. Determine the optimum position orientation of the lamp; vertical, horizontal or universal
4. Determine whether the fixture has a mogul or medium based socket and will be used with or without a lens (open or enclosed rating).
5. Make sure the ballast has the same ANSI number as the lamp.
6. Consider the cost/benefits of using a MH lamp with enhanced features.

Once these parameters are determined, the proper lamp choices are readily found in the lamp table.

FEATURES TO CONSIDER FOR REPLACEMENT LAMPS

- Position Oriented MH lamps provide higher performance (lumens/watt, longer lamp life) than Universal lamps of equivalent wattage.
- More energy saving MH lamps can replace standard MH lamps with virtually the same lumen output.
- Large energy savings and better lighting can be had for replacing very inefficient 400W watt mercury lamps with MH lamps.
- White light MH lamps can replace yellow HPS lamps in applications where better visibility and color rendering is needed, including areas where security cameras are used.
- MH lamps with added ultraviolet light shielding can be utilized in fixtures where polycarbonate lens rapidly yellow, i.e. parking garages.
- Open fixture rated lamps can replace enclosed fixture lamps to provide added safety and reduced maintenance cost.
- Low watt lamps, which has always been pulse start technology, are now available with open fixture ratings.

FEATURES TO CONSIDER FOR RETROFITTING TO A PULSE START SYSTEM

- Higher watt Pulse Start lamps with 50% longer life, quicker restart, and better color uniformity; come either with 10-20% more light or slightly higher lumen levels and 20% energy savings compared to standard MH lamps.
- Pulse Start ballast kits are now available for higher watt lamps in CWA Quad Tap and Reactor circuit types with Power Factors of 90%.
- The 277V Reactor ballast provides the maximum energy savings.
- Open fixture rated lamps are available for the higher watt Pulse Start lamps.

Safety concerns:

To reduce the potential for lamp rupture, Turn off lamps at least 15 minutes once a week

THIS LAMP CONFORMS TO FEDERAL STANDARD 21 CFR 1040.30
WARNING: This lamp can cause skin burn and eye inflammation from shortwave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Lamps that will automatically extinguish when the outer envelop is broken or punctured are commercially available.